

REMARKS

Claim 1 has been amended by combining former claims 1 and 4. Claim 4 has been canceled. Claims 1, 5-6, 12 and 13 currently are pending.

The examiner rejected claims 1 and 4-6 under 35 USC § 103(a) as being unpatentable over Nicholas et al. (US 3,668,034) in view of Vinod (US 5,965,232).

The examiner explains on page 3 of that Nicholas discloses a layered material comprising a thermoplastic backing layer, a thermoplastic intermediate layer and a metallized film thereon, whereby such metallized film comprises also chrome (see Nicholas et al., col. 1, line 41).

The examiner refers to this disclosure in Nicholas in very broad and general terms but the materials actually employed by the present invention for the claimed layered composite material are not comprise in the whole disclosure of Nicholas et al., not alone nor in the any combination.

verbal m^t
Examp The metallized film of Nicholas comprises a polyester film made of polyethyleneterephthalate (see col. 2, lines 29-30).

Examp The intermediate layer comprises vinyl polymers such as vinyl butyral polymers, vinyl chloride polymers, vinyl chloride-acetate polymers, vinylidene chloride polymers and others more enumerated in col. 2, lines 51 through 58.

Ex The backing layer of Nicholas' invention comprises also vinyl polymers, namely the same polymers as mentioned for the intermediate layer, preferably the intermediate bonding layer comprises a vinyl polymer and the backing layer comprises also a vinyl

polymer, as well (see col. 2, lines 62-70).

The instant invention, however, comprises in terms of claim 1: a substrate (=backing layers) comprised of a thermoplastic propylene homopolymer, an intermediate (bonding) layer composed of a thermoplastic polypropylene prepared in the presence of a metallocene polymerization catalyst, whereby said intermediate layer is designed as a non-woven filamentary layer, a decorative layer composed of a chromed metal (steel- example 1) and, a heat cured layer which is on top of the decorative layer.

removed from claims

The only connection between the layered composite material of the instant invention and the disclosure of Nicholas et al. seems to be the decorative layer comprising chrome. However, (1) the substrate layer comprising propylene homopolymer is not disclosed by Nicholas pertaining mainly to thermoplastic vinyl polymers. (2) The intermediate layer of polypropylene [made in the presence of metallocene catalyst and designed as a non-woven filamentary layer is not disclosed by Nicholas et al.] describing rather an intermediate layer composed of vinyl polymers. (3) The decorative layer comprising a chromed metal layer (as such) is not disclosed by the Nicholas reference rather pertaining to a metallized polyester film. (4) The heat cured layer is not disclosed by the Nicholas reference failing to teach any additional layer.

argued as filed

The surprising advantage of the instant invention is the presence of the intermediate layer designed as a non-woven of thin polypropylene filaments which is surprisingly [suitable and responsible for the creation of a strong connection between

the substrate layer and the decorative metal layer during injection molding of the polypropylene when employed for the substrate layer.

The office action cited additionally the Vinod reference as teaching the presence of a heat cured layer (col. 5, lines 13 and 14) on top of a decorative layer made of a fabric. Thus, the structure of the floor covering described by Vinod, which is designated as a carpet (see col. 1, line 20) differs essentially from the layered composite material of the instant invention, disregarding that fibers are described in col. 7, line 18, made of polypropylene. Such polypropylene fibers, however, are comprised in a cushioning layer, such as a carpet, comprising a primary backing laminated to a secondary backing material with tufts of yarn projecting from the primary backing (see col. 7, lines 11 to 14).

The inventors of the present invention felt that it was not obvious to replace all known materials from Nicholas' layered material by polypropylene, especially to replace Nicholas' intermediate layer by a non-woven filamentary layer, and to combine that new layered construction with a heat cured layer on top of the decorative layer which was mentioned by Vinod in a completely different arrangement, i.e., sitting on top of a carpet to prevent liquid permeation (see col. 1, line 10). The inventors did not have any intention of having that combination. Even since polypropylene mentioned at Vinod was only one choice of several other polymers proposed for an artificial carpet, which was not given any preference.

For clarification, applicants combine claims 1 and 4. Also, applicants limit the

decorative layer on a chromed metal by having claim 1 recite "consisting of" instead of "composed of."

For the reasons expressed above, it is urged that the prior art references cited by the examiner either singly or in combination fail to anticipate or suggest the present invention as defined by the amended claims. Accordingly, a *prima facie* case of obviousness has not been established by the examiner, and the rejection under 35 USC § 103 should be withdrawn.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,

KEIL & WEINKAUF



Daniel S. Kim
Reg. No. 51877

1350 Connecticut Ave., N.W.
Washington, D.C. 20036
(202)659-0100

DSK/kas

COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

1. (currently amended) A layered composite material which comprises a substrate made from a thermoplastic propylene homopolymer, and comprises an intermediate layer comprising thermoplastic a ~~non-woven~~ composed of a polypropylene prepared in presence of a metallocene catalyst arranged thereupon and a decorative layer applied to the intermediate layer, where the decorative layer consists ~~is composed~~ of a chromed metal and where a heat cured layer has also been applied to the decorative layer.

[2-4 (canceled)]

5. (original) A layered composite material as claimed in claim 1, where the intermediate later and the substrate are composed of the same thermoplastic.

6. (original) A layered composite material as claimed in claim 1, the total thickness of which is from 0.5 to 100 mm, at least 80% of which is made up by the substrate.

[7-11 (canceled).]

12. (withdrawn) A reflecting part of a household device, of a piece of furniture or of a molding in the electrical, construction or automotive industry or in the health sector, comprising the layered composite material as claimed in claim 1.

13. (withdrawn) An insulating part of a household device, of a piece of furniture or of a molding in the electrical, construction or automotive industry or in the health sector, comprising the layered composite material as claimed in claim 1.